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NATIONAL ENVIRONMENTAL CONFLICT RESOLUTION ADVISORY COMMITTEE

CASE STUDY REPORTS

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I. Background

The Applegate Watershed is located in Jackson and Josephine counties in Oregon, and Siskiyou County in California. Land ownership is 70% federal (Bureau of Land Management and Forest Service); the rest is mostly private and also includes some State and county lands. About 3,000 people live in southwest Grants Pass, which is part of the watershed; the other 9,000 or so people live in mostly rural areas with no incorporated towns.

The Applegate Watershed is home to people asserting a variety of interests; loggers, ranchers, environmentalists, and many others. In the early 1990's two individuals with seemingly divergent interests, Jack Shipley, an avid environmentalist, and Jim Neal, a long time logger, decided that a forum was needed to provide for structured discourse about Watershed issues. The two men formed the Applegate Partnership. The Partnership is open to the public, and meets weekly. The Partnership did initially have representatives from the BLM and Forest Service, but these individuals withdrew from the Partnership because of FACA concerns. The Partnership is now completely private in its membership. The board members of the Partnership include the following: environmental group representatives, agriculture representatives, a timber industry representative, a mining/geology representative, a representative from Southern Oregon University or Rogue Community College, and members at large representing geographic areas. Other members of the partnership serve on one or more subcommittees that deal with fire and fuels, forestry, and transportation. During its early years, the partnership used facilitators for its meetings. The Partnership has since decided to have its members facilitate most meetings. Controversial topics, however, are still facilitated by an outside party.

The goal of the Partnership is to develop proposals to promote the health of the Applegate Watershed and the communities therein. This successful collaboration process has yielded proposals for many ecologically appropriate projects and management recommendations. Many of the projects focus on restoration while also creating opportunities for local employment. Examples include riparian planting on private lands, installation of fish screens, fencing off streams, and reducing the risk of wildfire. The largest proposal to date now being implemented is the Applegate Fire Plan, a comprehensive fire and fuels reduction strategy for the Applegate Valley developed by the partnership with National Fire Plan funding. The Applegate Fire Plan has 26 different agency partners, including the Oregon Department of Forestry; county planning, GIS and emergency services departments; and others. Development and implementation of the Applegate Fire Plan has received over $2 million in funding, including $250,000 per year for three years as incentive funding for project implementation on private lands. Another two successes of the Partnership are that federal agencies have acceded to its request to end the practice of clear cutting on federal land within the Applegate watershed, and agreed to do full environmental review of salvage harvests despite the applicability of a statutory waiver at that time.

The group has moved from consensus to a supermajority (can have two dissenting votes) for making decisions. The Applegate Partnership works closely with the Applegate River Watershed Council, which is funded by the State and often provides funding to carry out Partnership proposals.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The Partnership proposes projects that will be ecologically appropriate, economic beneficial, and socially acceptable. The collaborative process gives agencies a sounding board for a cross section of interests, and often brings middle-ground solutions to the table.

Future Generations: This collaboration process yields ecologically appropriate projects benefiting future generations. The long-term impacts of decisions are always considered by the Partnership.

Dissemination of Information: Learning is shared through outreach and education by board members. The Applegate Fire Plan has been presented to and endorsed by the Western Governor's Association, and has been used by agencies as a model. The agencies made a flyer about the fire plan. Presentations have also been made to the Yale School of Forestry and other universities, and the Federal Emergency Management Administration. A newsletter (the "Applegator") is published and distributed to all households in the watershed about resource and community issues; its editor frequently attends partnership meetings.

How use of science enhanced process: A researcher at the Forest Service's Pacific Northwest Research Station first provided research assistance to the partnership; now Southern Oregon University, Oregon State University, Yale, and Northern Arizona University have taken on part of the role and provide fire and fuels reduction research, computer modeling, and other research activities. As one of ten Adaptive Management Areas, the Applegate depends on a strong monitoring program. The Partnership also utilizes field trips to discover the facts relating to on-the-ground issues. Also, the merging of maps across all ownership through Geographic Information System (GIS) has reinforced the perspective that this place is unique and merits a comprehensive integrated approach.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- Balanced representation of all essential interests
- Short-term and long-term implications of decisions explored and weighed
- Responsible and sustained engagement of all parties
- Process is voluntary, informal and flexible (not overly prescriptive)
- Structure allows for constructive discourse—agendas circulated beforehand, ground rules developed and enforced.

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: The partnership made a conscious decision to work with the agencies pre-NEPA. Their input is used to help develop purpose and need, and proposed actions. One person interviewed commented that by the time NEPA happens, the public process is too late to make significant changes; the agencies already have a year or more of investment.

National/Local: While the Partnership is primarily local in focus, it has worked on specific projects with the World Wildlife Fund, Defenders of Wildlife, and the Environmental Defense Fund. For example the Environmental Defense Fund is partnering with the Applegate Partnership on a project to integrate requirements of the Endangered Species Act and the Clean Water Act. Board members need to have time to stay informed to stay on the board.

Legitimacy of forum: Although the Applegate Partnership operates under a formal agreement, that agreement is very general and the group has more of a constituency than a membership. Meetings are open, and the consistency of participants over time helps avoid conflicts.

Decision-making authority: The Partnership develops proposals; it is not in a decision-making or even an advisory role.

CHANNEL ISLANDS MARINE RESERVE WORKING GROUP CASE REPORT

NOTE: This was a "consensus-building" effort, not a conflict resolution process.

I. Background

The Channel Islands National Marine Sanctuary surrounds Channel Islands National Park off the coast of southern California. The Marine Reserve Working Group (MRWG) was jointly sponsored by the Channel Islands National Marine Sanctuary and the California Department of Fish and Game and convened through the Sanctuary's Federal Advisory Committee Act (FACA)-exempt Sanctuary Advisory Council (SAC). The sanctuary is managed by the National Oceanic and Atmospheric Administration (NOAA) and surrounds Channel Islands National Park (a unit of the National Park Service). Fisheries within the state waters of the sanctuary are managed by the California Department of Fish and Game. In addition to these agencies, stakeholders included the National Marine Fisheries Service, and representatives of environmental organizations; consumptive and non-consumptive recreational and commercial interests.

The group's purpose was to consider the establishment of marine reserves within the sanctuary. Participants tried to balance marine ecosystem protection values with commercial and recreational fishing and diving uses. The collaborative group effort came before the start of the environmental analysis process, which in this case was a state (California Environmental Quality Act-CEQA) process rather than the federal NEPA process, since the state had jurisdiction over fisheries management. The group met for nearly two years participating in joint fact-finding and trying to reach a consensus decision on marine reserves. Facilitators were selected by the sponsoring agency rather than by the participants themselves. The third party neutrals engaged in considerable between meeting communications and shuttle diplomacy between and among groups. The U.S. Institute for Environmental Conflict Resolution was involved as an institutional broker among the agencies and with the contracted neutral.

The group reached agreement on a problem statement, goals and objectives, and implementation strategies. They worked on developing alternatives and assessing their economic and environmental impacts. The group did not reach full consensus on a comprehensive recommendation regarding marine reserves. However, they did reach agreement on about 85% of the proposed locations and sizes of a network of marine reserves within the sanctuary. They also reached agreements regarding monitoring approaches and recommendations for implementation. The group improved productive working relationships, and generated a significant knowledge base relevant to scientists, decision makers, resource users, interested stakeholders, and the public. Although the group did not reach full consensus on a proposal for marine reserves, the issues in dispute were narrowed. Some participants returned to their original positions on issues and litigated the eventual state agency decision.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The process resulted in a more informed and higher quality decision that attempted to achieve environmental benefits while minimizing negative economic and social impacts. Early on, the working group developed a problem statement that captured the current disharmony in the situation, and stated a desire to restore the integrity and resilience of impaired ecosystems. It spoke of "developing new management strategies that encompass an ecosystem perspective and promote collaboration among competing interests". The group attempted to find ways to achieve ecosystem goals without unduly impacting any single interest group. Proposals were generated that responded to a multitude of interests rather than more narrow or limited interests.

Future Generations: Goals and objectives for the working group included enhancing long-term ecosystem productivity, achieving sustainable fisheries, and maintaining long-term socioeconomic viability while minimizing short-term socioeconomic losses to all users and dependent parties. The working group discussed the historic conditions of the ecosystem and the people who used it, and talked about how they wanted their kids to share the same experiences that they had known.

Dissemination of Information: A very positive outcome was that the personal responsibility for the environment taken on by participants, spread to others in the groups they represented. The working group was very aware of the importance of their decisions to the Channel Islands marine environment. They sought to foster stewardship by providing educational opportunities and linking monitoring and research. They developed a better understanding of both the substance and process of marine resource policy making. The working group members realized that bringing along their constituents was key to building broad support and they developed individualized outreach plans to help ensure that this occurred.

Pragmatic Solutions: There was a strong awareness of practicality within the working group. Along with the substance of a decision, how it would be implemented was a major focus, as evidenced by the group's recommendations that a system be established for effective monitoring and that an interagency Memorandum of Understanding be developed to address enforcement requirements.

How use of science enhanced process: An existing University of California/Santa Barbara research group of 12 scientists agreed to serve as a Science Panel for this effort at no cost to the working group or participating agencies. Although the Science Panel included a range of natural scientists, one critique was that the perspectives of applied scientists, especially fisheries management scientists, were not included on the Science Panel. A Socioeconomic Team was also used, made up of NOAA economists along with contracted local social scientists and economists. While both the Science Panel and the Socioeconomic Team contributed valuable information to the working group, some participants did not always view them as credible and impartial. When using scientific advisory panels, it is important to be clear about roles, responsibilities and relationships between technical experts and stakeholder advisory groups. A

GIS-based decision support system tool was developed by the sanctuary's staff and used extensively by the working group. Numerous iterations of GIS maps were used to help the working group build common ground on a recommendation and obtain feedback from their constituencies and the general public.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- Balanced representation of all essential and affected interests and values
- Participants have access to best available information
- Use of decision-support technology to facilitate engagement and evaluate alternatives

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: This was an "upstream" effort, before the start of the NEPA/CEQA process, but much of the group's work was later used in the environmental analysis process. Since the state environmental analysis process followed the dispute resolution process, this provided another forum to the participants who were dissatisfied to pursue their interests.

Legitimacy of forum: Working under the Sanctuary's FACA-exempt advisory council added legitimacy and made the working group exempt from FACA also.

Decision-making authority: The Sanctuary Advisory Council was committed to passing on the working group's agreements essentially intact to the Sanctuary management. The decision-making agencies were committed to adopting the group's consensus recommendations. When full consensus was not reached, items of agreement and disagreement were passed on the Sanctuary Advisory Council.

COLLABORATIVE ENVIRONMENTAL AND TRANSPORTATION AGREEMENT FOR STREAMLINING (CETAS) CASE REPORT

I. Background

After the passage of the Transportation Equity Act for the 21st Century (TEA-21), the number of transportation projects in Oregon doubled. To streamline the review process, in 1996 Oregon merged its NEPA and Section 404 processes. However, ODOT's increased workload prevented the merger from being fully implemented until 2000. The Collaborative Environmental and Transportation Agreement for Streamlining (CETAS) Group, formed in June 2000, committed to promoting environmental stewardship while providing for a safe and efficient transportation system.

Agencies scope projects to determine if they are Major Transportation Projects likely to require an Environmental Assessment or Environmental Impact Statement. For these projects, at monthly meetings, agencies receive project briefings and concur on Purpose and Need, Range of Alternatives, Criteria for Selection, and Preferred Alternative. Once concurrence is reached, issues are not revisited unless major project changes or new endangered species listings occur.

Streamlining efforts for minor transportation projects focuses on broadening the use of programmatic agreements and implementing wetlands and habitat banking. Once a programmatic agreement is in place, it can be applied to elements of larger projects as well.

Transportation and resource agencies in Oregon discuss issues early in the NEPA process through regular working group meetings, fostering relationships built on trust. Decision-making is by consensus. Elevation to the next level of decision-makers within the agencies occurs on the rare occasion when consensus is not reached. The group does not have a neutral facilitator; meetings are led by ODOT participants.

Participating agencies include the federal and state Departments of Transportation, as well as a variety of other State and Federal agencies. Early resource agency involvement accelerates the NEPA process by avoiding agency conflicts and subsequent permit delays during final design, allowing projects to be completed in budget and on time. Efficiency in the project permitting process is achieved without compromising agency missions. Obstacles had to be overcome. For example, some resource agencies did not have the staff to participate. ODOT now funds three TEA-21 coordinator positions at NMFS, one position at FWS, and three positions at the Oregon State Department of Fish and Wildlife.

An example of success: ODOT was able to obtain permits in one week to build a temporary culvert in place of a failing bridge, allowing emergency equipment such as fire trucks to reach a part of eastern Oregon. The culvert was removed in time for local endangered fish to spawn, and the bridge repaired in an environmentally sound manner.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: CETAS allows agencies in Oregon to expand the state's environmental goals and guidelines. As a result, Oregon transportation agencies are mapping natural and cultural resources, balancing interests by implementing a habitat mitigation program, improving partnerships with resource agencies, instituting an environmental management system, and developing a seamless transportation development process with local partners and contractors.

Future Generations: The resulting cultural changes in the transportation agencies from this program are expected to last over time, benefiting future generations environmentally and economically. The parties have demonstrated their commitment by good attendance and participation in the CETAS meetings, and by suggesting issues for and working out programmatic agreements.

Information Dissemination: This occurs through consultations between agency participants and peers within their respective agencies, for both projects at various NEPA steps, and programmatic issues. The agency representative interviewed felt that there was still room for improvement in this area.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- Clear goals, objectives, and expectations defined
- Responsible and sustained engagement of all parties
- Structured process design to facilitate timely productive and effective engagement
- Process consistent with existing laws and regulations, agency missions, policies and legislative parameters

III. How Case Responds to Other Themes of Interest

Upstream/downstream: The CETAS process covers the whole "midstream" spectrum, beginning with Purpose and Need, continuing through alternatives, criteria for selection of a preferred alternative, and identification of the preferred alternative. Beginning with Purpose and Need is a key point in the success of the project. So far in the process, there has been one example of the group not being able to reach consensus, and this was on identification of a preferred alternative. The group had agreed on criteria for selection, but thought that it would lead to a different outcome.

Legitimacy of forum: Operating under a formal agreement gives the group credibility and helps ensure that it continues. Members are designated in the agreement by position, with changes occurring when agency representatives move on and are replaced by a different employee. This results in some "catch-up time" for the new member, but so far new members have been well briefed by their outgoing counterparts.

Decision-making authority: The group operates by consensus, which has worked well with the one exception described under "Upstream/Downstream". For this disagreement, an elevation process was developed whereby the next level of decision-makers within the agency attempts to reach consensus; this process will now be used if lack of consensus occurs in the future.

COCONINO NATIONAL FOREST ANTELOPE HERD MANAGEMENT PLAN CASE REPORT

I. Background

This collaborative effort occurred during the NEPA process for management of two grazing allotments on Anderson Mesa in the Coconino National Forest in northern Arizona. In 2000-2001, an environmental assessment was being prepared with the involvement of the Diablo Trust, a collaborative stewardship group that included the permittees for these two allotments in its membership. The group included the Forest Service as well as a variety of State agencies, and environmental groups. Because of the broad scope of projects being proposed, the Forest Service decided to prepare an Environmental Impact Statement rather than an environmental assessment. With the help of the U.S. Institute for Environmental Conflict Resolution (USIECR) and a contracted neutral, parties who had previously opted out of the earlier collaborative process then joined the group. The group's purpose was to reach agreement on the possible causes of the decline of antelope populations in the area, and approaches to management that would prevent further decline in herd size.

This was a collaborative stakeholder group with neutral facilitator. The group met intensively for about a year and a half in large groups as well as in small groups. The meetings were open to all who were interested and meetings were periodically attended by the media. Parties continue to meet twice a year in the context of implementing adaptive management strategies. The group also communicates more often via electronic mail.

Agreements were reached on a draft management plan, which included proposals for vegetation treatments and fencing, grazing recommendations, ephemeral wetlands projects, nutritional supplements, plans for drought and winter emergencies, predator control, monitoring, and adaptive management. These agreements were incorporated into the Anderson Mesa Pronghorn Plans developed by the Arizona Fish and Game Department, and an EIS for the two grazing allotments on National Forest lands. Other key outcomes were that this process is being adapted for use on other planning efforts undertaken by this National Forest; and although litigation was not avoided, the issues in dispute have narrowed, and the litigants continue to have a working relationship with the Forest Service.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: Enhancing the quality of wildlife habitat and wildlife health were key features of this effort. While the group recognized that "no cattle was not an option", ranchers were willing to reduce numbers grazed to meet environmental values, to the extent economics would allow (reductions were in the 5-10% range). This effort was natural science-based, but social issues were also addressed.

Future Generations: A sustainable resource base for wildlife and ranching was a goal. Some parties feel the goal was fulfilled, and some feel that the efforts did not go far enough. The

Diablo Trust, an existing multi-stakeholder group that this effort built on, is committed to principles of ecological sustainability. Arizona Department of Game &Fish organizes the Adaptive Management meetings and has worked with the Forest Service in implementing land-based management strategies outlined in the antelope management plan. Representatives from other participating interests have provided volunteer support to the land-based activities. The collaborative group adopted an adaptive management plan in their recommendations, and representatives of the group continue to be involved in implementation and monitoring.

How use of science enhanced process: Scientific reports relating to the antelope were critical to developing proposals for discovering the cause of decline in the antelope population.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- Balanced representation of all essential and affected interests and values
- Responsible and sustained engagement of all parties
- Structured process design to facilitate timely productive and effective engagement
- Third-party neutral assistance

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: This collaborative effort could be considered "mid-stream" in terms of NEPA because it occurred after starting an Environmental Assessment (EA) and before beginning an Environmental Impact Statement (EIS). Some, but not all, of the parties to this effort also collaborated on the EA. The agency slowed down the NEPA process until all stakeholders were brought in, which was helpful.

Participant factors: The group included federal and state agencies, the Diablo Trust, ranchers, and representatives of state and national wildlife organizations. The national wildlife organization appointed the representative from the state organization to represent the national group in the process. Differences in power and influence were leveled by working in small teams and through one-on-one conversations with the neutral facilitator for the purposes of capacity building.

Legitimacy of forum: This process was able to build on an existing multi-stakeholder group, in this case the Diablo Trust, whose members were already comfortable with collaboration. Additional parties were engaged to assure full balanced representation of affected interests. After an initial private organizing meeting, the meetings were held regularly in public.

Decision-making authority: In this case, the decision authority rested with the Forest Service. The Forest Supervisor made a commitment to consider incorporating elements (if not all) of the group's work into the alternatives analysis of the EIS. There was not a guarantee that it would be the preferred alternative.

CORRIDOR H CASE REPORT

I. Background

Road construction began in the 1960's on a 13-state corridor system for the Appalachian Mountains. However, the proposed Corridor H highway through West Virginia was not built due to the mountain topography, construction costs, and estimates of traffic volume. By the early 1990's all of West Virginia's corridors were open with the exception of Corridor H east of Elkins.

At the heart of the conflict over the highway were disputes regarding economic development, highway safety, and preserving historic resources. Some area residents, tourist businesses, and environmental groups opposed the construction. They raised questions about whether Corridor H would indeed bring the intended economic benefits, and whether it would also negatively impact historic and recreation areas. A variety of citizens' groups throughout the state formed a coalition that opposed the state's plan and successfully halted construction of most of the highway. They (environmental, historic preservation, property owner groups) brought a lawsuit against the Federal and State Departments of Transportation based partly on the alternatives requirements of the National Environmental Policy Act (NEPA) and partly on the historic preservation process requirements of Section 4(f). After a mediation attempt failed to reach settlement, the Court of Appeals decided that the NEPA alternatives were appropriate, but that the agencies had not done a proper job on the Section 106 (historic preservation) process, and sent the case back to District Court. After the parties reached agreement, the agencies had to do a supplemental Environmental Impact Statement and a new Record of Decision for agreed-to changes in alignment. This case represents a melding of what can be done in the litigation process with what occurs with the NEPA process.

Following a ruling by the Federal Court of Appeals for the District of Columbia that allowed construction to proceed at a slower pace than the state proposed, the case was co-mediated by a contracted mediator and the Director of the District of Columbia Federal courts' alternative dispute resolution program between late 1999 and early 2000. The mediators organized and led discussions on issues that ranged from ways to protect historic and scenic resources (including alternative routes and designs for the highway), to use of public rights-of-way for signs. Issues mediated included the Section 106 process, how to address the NEPA process, and substantive issues around historic preservation, the environment, economic development in the corridor, and highway alignment. All parties to the litigation were represented in the mediation, although some participants represented more than one organization. Through mediation the participants were able to look at the underlying issues, which couldn't be done in litigation. The mediation effort was a six-month process.

With the mediators' leadership, the parties reached an agreement that settled the lawsuit and allowed construction of the highway to move forward. The agreement spelled out changes to the sequencing and timing of construction as well as the route and design of the highway. It also

established mechanisms for dealing with disputes that might arise during construction of the highway with regard to endangered species, historic resources, and requirements of the National Environmental Policy Act. The subsequent NEPA decision was not litigated and is being implemented.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: Ecological health was addressed in the location and design of the highway by considering the impact of construction on endangered species. Economic well being of several towns along the highway was addressed in the settlement, although not every economic interest was represented among the participants. The procedural interests of participants were balanced by establishing within the agreement a process for resolving disputes that arise during construction of the highway.

Future Generations: As noted above, ecological health was addressed by taking into account the impact of construction on endangered species

Dissemination of Information: Each participant at the table took back information to their constituencies. However, this was a confidential process and the agreement was not revealed until the settlement was signed. The public process was the supplemental NEPA analysis done afterwards.

Pragmatic Solutions: Various options were considered around the location and design of the highway. These were worked through with practicality as a factor as well as economic, ecological, social, and cultural factors.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- Clear goals, objectives and expectations defined
- Structure process design to facilitate timely productive and effective engagement
- Representatives keep their constituents informed and have authority to negotiate on their behalf
- Scope of issues for negotiation narrowed for practical resolution
- Usage of a neutral mediator

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: Litigation process is the "downstream" end of the NEPA process. The NEPA and Section 106 processes had to be redone as a result of the late resolution.

Participant factors: Mediated litigation does not necessarily involve a balance of all interests. Most of the stakeholder groups involved were statewide organizations, one was a local chapter. An issue arose at the end of the process, as the group was ready to sign the settlement. There

was a question of one the participating groups being able to sign off on the settlement because it was a local chapter of the national organization. The national group did sign off after modifications were made to the preliminary agreement. A knowledge imbalance existed in regard to traffic modeling, engineering and cultural resources, so time was spent educating the participants. Power was given to participants by virtue of being in the litigation process, and was somewhat equalized in this case since the court had found for each side on some issues.

Legitimacy of forum: The formality of going through the judicial process, and a formal agreement to mediate, provided legitimacy to the forum.

Decision-making authority: This authority was shared in reaching a settlement within the mediation process, but the State and FHWA were the ultimate decision-makers for the subsequent NEPA decision.

EVERGLADES CASE REPORT

I. Background

In early 2001, the U.S. Army Corps of Engineers contacted the U.S. Institute for Environmental Conflict Resolution to inquire about neutral assistance in resolving a long-standing interagency conflict over the use and interpretation of hydrologic modeling results related to emergency water management decisions designed to protect the endangered Cape Sable seaside sparrow. The Corps was working on an EIS for an Interim Operational Plan (IOP) to protect the endangered sparrow until a longer-term plan could be completed. The Corps had already completed a Draft Environmental Impact Statement, but it had not been well received by other agencies. The other agencies involved included Everglades National Park (ENP), U.S. Fish and Wildlife Service (USFWS), and the South Florida Water Management District (SFWMD), whose concurrence the Corps needed to implement a viable decision. Because the interagency collaboration was initiated after the issuance of the draft EIS, which did not include cooperating agencies, the lead agency did not formally designate the other three agencies as cooperating for the subsequent Supplemental EIS. However, once engaged, they functioned essentially as cooperating agencies. (They have since negotiated a Memorandum of Understanding together and have been designated cooperating agencies for a subsequent EIS process for the longer-term plan.)

Several months of negotiations were facilitated by the U.S. Institute and two Florida-based contractors. Differing agency cultures and institutionalized negative attitudes towards each other's agencies were major challenges noted in the conflict assessment. The collaborative process was specifically designed to help address these difficulties; neutral facilitation was a key part of the process design. Ongoing neutral facilitation assistance has been provided to deal with implementation challenges that have been addressed through ad hoc interagency negotiation teams.

Negotiations led to an interagency agreement on a preferred alternative, which was incorporated into a Supplemental DEIS that was then issued for public comment. The preferred alternative continued to be refined based on stakeholder comments for the FEIS and up until the ROD was issued. The collaborative group also agreed on protocols for monitoring. The agencies were generally satisfied that a higher quality decision resulted, which is currently being implemented despite subsequent litigation initiated by a federally recognized tribe. During implementation, some additional facilitated discussions were needed to clarify and interpret the agreement. The four agencies are currently involved in a multi-stakeholder EIS process for the longer-term plan that will actively involve other state, local, and tribal governments, as well as concerned stakeholders and nongovernmental organizations.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: Ecological values, including protection of endangered species and other wildlife habitat, were incorporated along with economic and social concerns regarding agricultural and residential flooding. Feedback was obtained from external groups who were not directly involved in the process. Some felt that the single-species approach of the Endangered Species Act made it more difficult to meet this goal. Natural scientists and engineers were involved, but not economists or sociologists. In this case, flooding impacts served as the primary surrogate for socioeconomic concerns.

Future Generations: Participants acknowledged the importance of their efforts to help restore the Everglades ecosystem for future generations. Recovery of an endangered species was of particular concern to the U.S. Fish and Wildlife Service. All the agencies sought to ensure the sustainability of the ecosystem while minimizing immediate economic impacts. Specific on-the-ground improvements have already resulted with the Corps expediting the construction of some features to enhance the existing water delivery system.

How Process enhanced Use of Science: The participants are now working to establish measurable performance standards for the ecosystem being restored. Modeling was used to predict effects on flood protection and establishment of the desired hydrologic conditions for the endangered sparrow. Refinements were made to existing models, which were originally designed for use at different scales. Results had to be extrapolated, taking into account the limitations of the models. An interagency team collaboratively developed a Scope of Work for the development of a new hydrologic model to be used for the longer-term planning process

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- Initial assessment determines appropriateness of ECR approach and process design
- Process design addresses relevant inter- and intra-governmental relationships
- Responsible and sustained engagement of all parties
- Structured process design to facilitate timely productive and effective engagement
- Skilled neutral facilitation
- Agency leadership engaged.

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: This case could be considered mid-stream in that agencies collaborated on an interim plan that preceded a longer-term planning effort but only after arriving at an impasse following release of the draft Environmental Impact Statement. While the draft EIS prepared by the lead agency provided a starting point for negotiations, it might have saved time overall if they had worked together from the beginning of the NEPA process.

Legitimacy of forum: Some stakeholders wanted more transparency of the interagency negotiations and direct involvement in the decision-making process than was available through the interagency/inter-governmental NEPA process.

Decision-making authority: Interagency negotiation teams reached agreements by consensus on recommendations that were then forwarded to agency leaders for their review and ratification. An "elevation process" was used, whereby if consensus could not be reached by the group, the issue along with areas of agreement and disagreement would be taken up by State or Regional level officials of the participating agencies for further negotiations and resolution.

FIRE ISLAND NATIONAL SEASHORE CASE REPORT

I. Background

Fire Island is a narrow, 32 mile island located off of the south shore of Suffolk County, New York, approximately 40 miles from New York City. The Fire Island National Seashore (FINS), administered by the National Park Service (NPS), makes up 26 miles of the island. FINS was established by Congress in 1963 to conserve and preserve the unspoiled and undeveloped beaches, dunes, and natural features of the area. The seventeen communities within FINS have a combined summer population of 25, 000 residents. In addition, the Department of Transportation estimates that there are over 4 million recreational visits to FINS each summer. Visitors overwhelmingly arrive at the park by ferry, as there are no roads that go through FINS. However, there are two causeways that connect Long Island to the east and west portions of FINS.

Driving on Fire Island is a subject of high emotion. Most driving occurs in the island interior on concrete or wooden boardwalks pursuant to the NPS off-road driving regulations. These regulations have been a source of controversy since they were implemented in 1987. The regulations allocate a set number of permits to year-round residents, utility companies, and contractors. They allow a certain amount of driving on the beach, in areas that are habitat for rare, threatened, or endangered species, such as the Piping Plover, a small bird that became listed as an endangered species in 1986.

In 1998 the Superintendent of FINS reviewed the regulations, and came to the understanding they were unpopular with a wide variety of user groups on the island, and at the same time, might not be doing an adequate job of protecting rare, threatened, or endangered species, or promoting public safety. NPS partnered with the U.S. Institute for Environmental Conflict Resolution, and hired two experienced mediators to carry out a Conflict Assessment (CA) to determine if the dissatisfaction with the regulations was a problem that could be solved by a conflict resolution process. The CA contains the results of over 50 interviews and concluded, essentially, that a negotiated rulemaking was likely to succeed if conducted according to the best practices of environmental conflict resolution. The NPS took this recommendation and formed a federal advisory committee (FACA) up of representatives of all the parties that had an interest in Island driving, and included the 17 communities on the island, park visitors, Suffolk County, (including its police force), and other groups. Altogether, 24 interests were represented on the FACA committee. The NPS hired the mediators who performed the CA to facilitate the workings of the committee.

Committee meetings were facilitated through a formalized structure that allowed the parties to agree on a set of ground rules for operation, a "process map", and a set of principles to underlie the substance of their work. The principles consisted of 14 points, with the first point being that the regulations must protect FINS, including its natural resources, and its communities.

From June 28, 2002, to August 16, 2003, the FACA Committee met five times—four 2-day sessions, and one single day session. The integrity of the process was threatened in the early going when NPS proposed a solution to the problem without seeking any input from the group. This caused several members of the group to question the transparency of the process, and their ownership of the process. The group eventually got beyond their concerns by following the ground rules and the process map, which enabled the parties to work on solutions to the problem. Indeed, when the NPS ran out of funding for the collaborative, local communities made up the funding difference to keep the process going. The group reached consensus on approximately 75 percent of the issues that it considered. These consensus agreements will be reflected in the draft rule. The ground rules allow NPS to take into account the partial consensus reached on the remaining 25 percent of the issues in developing the regulation. Among other things, the Committee developed definitions of permit categories; agreed on the closing of certain federally-owned beaches on a year-round basis, advocated allocating permits on existing practice and previous regulations, and advocated requiring permittees to go through training in order to qualify for a permit. The Committee also advocated for the establishment of a permanent collaborative body to deal with driving issues.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The participants represented interests that sought access to the beach year-round, and those who sought a greater degree of protection of the parks' fragile resources. The draft regulations will attempt to balance these interests by protecting the habitat of the fragile environment and wildlife, by promoting public safety, and by allowing for permanent and seasonal residents to enjoy the resources of the island.

Future Generations: One of the central concerns of the process was the health of the six rare, threatened, or endangered species on the island, and how they were impacted by driving. The agreements reached should allow for their protection, enabling them to be enjoyed by future generations. In addition, future generations should have the opportunity to enjoy the Island's unique character and lifestyle as a result of the balances struck in the agreement.

Fact finding/ use of Science: The process brought together individuals who had never met, despite living on the same island. The process forced these individuals to think of driving in terms of its effect Island-wide, rather than just on their particular communities. This led to more of an ecosystem-wide approach to the crafting of solutions.

How Information was disseminated: Because this effort took place under the auspices of a FACA Committee, all the meetings were open to the public. Minutes and notices of meetings were made available to the public through the FINS website, and other sources. In addition, through regular interaction with the media, many stories about the process appeared in the local and New York City print and television media.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- Formal structure of committee
- Establishment of ground rules, guiding principles
- Emphasis on interests
- Use of conflict assessment
- Use of mediators
- Establishment of subcommittees for fact finding
- High degree of autonomy
- Commitment by Park to adopt consensus recommendations
- Formation of participant group to continue collaborative effort
- Commitment by participants to fund collaborative
- Transparency of Process

IV. How Case Responds to Other Themes of Interest

Upstream/downstream This is upstream—an Environmental Assessment will be issued to accompany the rule making.

Participant factors: Although this was primarily a local issue, there were some clashes that were heightened by the local or national perspective of the particular parties to the dispute. The NPS, for instance must act nationally (particularly in its enforcement role), as well as locally, (as a member of the community). The Suffolk County Police Department, on the other hand, is more concerned about local law enforcement. This divergence of missions led to some conflict during the collaborative process, as the existing regulations restrict to some extent the County Police Department's ability to patrol on the beaches.

Legitimacy of forum: The formal structure provided by the mediators, (and mandated to some extent by FACA), which led to the adoption of a process map, ground rules and a set of principles, gave the parties ownership of the process, and a belief that the process would afford them a fair opportunity to be heard.

Decision-making authority: The NPS noted at the outset that it would be the ultimate decision maker on the content of the regulations. However, it informed the committee at the beginning of its work that it would make all consensus recommendations that were within its legal authority, and consider the majority opinion of the group on all other issues.

I. Background

The Glen Canyon Dam is located in Arizona, and is the last reservoir to store water before it enters the Lower Colorado River Basin. Arizona, Nevada, and California receive most of the water stored by the reservoir, but the basin also includes parts of Utah, Colorado, New Mexico, and Wyoming under the Colorado River compact. Since Glen Canyon Dam was completed in 1963, increasing concern was expressed by the public and Federal and State agencies regarding how dam operations may be adversely affecting the downstream environment. In November 1989, the Secretary directed an Environmental Impact Statement (EIS) be prepared on the operation of Glen Canyon Dam, and the Secretary designated the Bureau of Reclamation (BOR) as the lead agency. This Final EIS, completed in March 1995, received broad and intense interest from water and power users, environmental and conservation groups, Federal and State agencies, Indian tribes, and private citizens across the country.

Findings from the EIS indicated that many uncertainties still exist regarding the downstream impact of water releases from Glen Canyon Dam on water, sediment, fish, vegetation, wildlife and habitat, endangered and other special status species, cultural resources, air quality, recreation, hydropower, and non-use value. In compliance with the Grand Canyon Protection Act (Act) of 1992 (Public Law 102-575), the EIS proposed a process of "adaptive management" whereby the effects of dam operations on downstream resources would be monitored and assessed. The Act and the EIS are the guiding documents for development of the Adaptive Management Program.

The Record of Decision was signed by the Secretary of the Interior in October 1996, and in 1997, Interior Secretary Babbitt established the Glen Canyon Dam Adaptive Management Work Group (AMWG), a Federal Advisory Committee. The AMWG consists of the Bureau of Reclamation, U.S. Fish and Wildlife Service (USFWS), National Park Service, as well a variety of other federal, state, and Tribal agencies, along with environmental groups, user groups, and energy industry representatives. The AMWG makes recommendations to the Secretary on how to protect the resources and meet the requirement of the law. Three proposed changes in management have undergone separate NEPA analyses to date. For example, in the spring of 1996, a weeklong extra release of water was done with an Environmental Assessment (tiered to the EIS). More recently, in 2002, changed operation of experimental flows, and mechanical removal of non-native fish (mainly trout that had been introduced by USFWS years ago) to benefit the endangered humpback chub, were approved with an Environmental Assessment

The AMWG held its first meeting in September 1997, and officially formed the Glen Canyon Technical Work Group (TWG) as a subgroup to provide detailed guidance on technical and scientific issues and objectives. The Grand Canyon Monitoring and Research Center (GCMRC) conducts the research and monitoring needed to evaluate operations.

The Secretary of the Interior designee chairs meetings of the AMWG. GCMRC brings science to TWG, who brings recommendations to the AMWG. AMWG approves recommendations by two-thirds vote, if needed, after extensive efforts to achieve consensus.

Since November 1999, a mediator/facilitator has participated in those parts of the meetings when sensitive or contentious issues are discussed. Since October 2002, all AMWG meetings have been facilitated. The facilitator also helps with ad hoc committees, where contentious and thorny issues are often worked through. Ad hoc committees can be formed by AMWG or TWG and there are nine or ten at this time; there is no process for disbanding them.

The group's facilitator started out as an AMWG member, and was contracted to provide "facilitation with a strong mediation component" after having left the member organization. The facilitator helped them form consensus around a mission, vision, and principles, and work through many of the complex and numerous issues. As stakeholders gain trust in the process, they look beyond the dam to other issues in the watershed. AMWG selects members for subcommittees from the larger group in a way that if the small group agrees, the larger group is also likely to agree. Processes to assist the group in difficult decision-making, such as process mapping and paired comparisons, have also been used.

Annual agreements on work plans and budgets (the program is funded through hydropower revenues) have been achieved after lengthy discussions. There have been agreements on experiments that will be done, but few policy recommendations thus far. A strategic plan has been completed and sent to the Secretary. Three reports and recommendations have been forwarded to the Secretary. The group reached consensus on vision, mission, principles, goals and management objectives, and has prioritized over 250 information needs in sequence order to guide the work of the research center.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The committee has a balanced make-up; a deliberative process is in place among stakeholders whose interests represent a full cross-section of interests.

Future Generations: The process should produce better quality decisions about the operation of the dam, and its effect on the Colorado River. This should benefit future generations.

Dissemination of Information: This has been a challenge for the program. An ad hoc group has been formed on public outreach, with funding, but they have not settled on an outreach process. Outreach has been more event-based so far, especially when negative public reactions are expected. Websites, newspaper articles, and magazine articles reach the broader public.

How use of science enhanced process: The GCMRC conducts the research and monitoring needed to evaluate operations; independent review panels conduct the outside review necessary to provide credible science; and protocol evaluation panels are convened at five-year intervals, and then disbanded.

A Science Advisors Board of about 10 high level scientists is a standing body to provide advice on an ongoing basis. It is made up of experts on particular resources and on adaptive management. Outside experts are brought in often. Other approaches that help with scientific issues include issue-focused subcommittees and face-to-face meetings.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- Structured, independent forum
- Use of facilitator (promotes structured discourse)
- Balanced representation of all essential interests at the table
- Appropriate use of scientific information
- Draft agreements are tested to ensure future contingencies are planned for

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: Multi-stakeholder collaboration should have occurred earlier ("upstream"); the pre-NEPA advantage is that the agency can be at the table. BOR spent $85-100 million dollars avoiding NEPA according to one person interviewed. It is critical to use a collaborative process at the monitoring and adaptive management stage. An ECR-related structure is needed for this.

Local/National: Representation is local/regional.

Legitimacy of forum: FACA committee meetings, public notices, websites, minutes and reports are available to the public. There is an opportunity for public input at AMWG meetings prior to all recommendations and motions.

Decision-making authority: This group is advisory to the Secretary of the Interior, which issues decisions back down to its agencies, so it is not a threat to individual agencies. Attorneys participating in the process remind the group that these are only recommendations

HANFORD COMPREHENSIVE LAND USE PLAN CASE REPORT

I. Background

The 586-square mile Hanford Nuclear Site is located in Washington State. The decision to be made was how lands at the Hanford Nuclear Site would be used after clean up, including potential changes in land ownership from the Department of Energy to others. A Federal Advisory Committee, the Hanford Future Site Uses Working Group, was convened before the scoping stage of NEPA. As the lead agency, DOE developed the Purpose and Need for an Environmental Impact Statement (EIS). Cooperating agencies included U.S. Fish & Wildlife Service (USFWS), Bureau of Land Management, Bureau of Reclamation, Benton County, Franklin County, and Grant County, and the city of Richland. Consulting governments (the interpretation of NEPA at the time limited cooperating agency status for tribes to tribal lands – this has since changed) included the Confederated Tribes of the Umatilla Indians and the Nez Perce Tribe. The Yakama Nation, an ex-officio participant, was represented at most meetings.

Contracted neutrals facilitated a group of about 50, including those from agencies and the public. Input from this group, along with public comments from scoping, was used for first Draft EIS. The FACA group was re-chartered as the Hanford Advisory Board under EMAB (Environmental Management Advisory Board) to work on the clean-up aspects. The intergovernmental group continued to work on the Land Use Plan. There was a lot of controversy over the north slope of the river; some wanted it in farm production, others wanted to keep it in federal ownership to maintain treaty rights and expand a National Wildlife Refuge or transfer it to the Bureau of Indian Affairs to be placed in trust for the Tribes who had ceded the land. Some former landowners from before the nuclear site was created wanted their places back. A contractor compiled the EIS with significant assistance from DOE, the Counties and the Tribes. DOE facilitated the intergovernmental group with help from one of the contractor's staff, but different agencies took leadership of issues at different points. The process used was to attempt consensus, with the option for agencies to make their own alternatives -- which is what occurred.

Some of the cooperating agencies and consulting tribal governments strongly favored mutually incompatible future land uses, particularly regarding industrial and agricultural development versus environmental preservation. To provide fair opportunities to analyze competing interests, these agencies developed their own alternatives for consideration in the EIS, using guidelines to yield technically comparable information. All agencies involved also worked on the framework for environmental analyses, and on the land use plan's policies and implementing procedures. The procedures, that became part of the Record of Decision, include continued participation of the consulting and cooperating agencies in future land use decisions. More than one draft EIS was completed. The first one, the Hanford Remedial Action EIS included clean-up actions along with the land use plans, in an attempt to look at the whole picture. The clean-up scenarios were removed at the request of the Environmental Protection Agency, which had jurisdiction over the clean up. A revised draft, the Hanford Comprehensive Land Use Plan EIS, was issued and it included the cooperating agencies. DOE tried to incorporate aspects of the other alternatives in

the Preferred Alternative, and DOE made the decision (DOE's decision making authority was clear among all parties from the start).

Substantial agreement was reached on the framework for environmental analyses, and for the land use plan's policies and implementing procedures. Part of the decision was trumped by subsequent designation of a national monument for half of the area, using the EIS as the basis for the decision. As a result, one county did not get anything they wanted. (This county is very rural, with orchards and vineyards, and hoped to reduce their fixed water costs as originally envisioned in the 1940's Grand Coulee Dam development. This county is angry with the federal government and no longer participates much in the ongoing groups.) DOE's Record of Decision currently guides the rest of the area. Now USFWS is doing another EIS and Comprehensive Conservation Plan for management of the monument and a wildlife refuge. This new CCP/EIS process is being advised by another DOI chartered FACA group. Currently there are two FACA committees giving advice to two different federal agencies on the same land, which is now under joint administration between DOE and USFWS.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: Half the site went into preservation and is now a National Monument, with the involvement of DOE's Office of Science. The land use designation for much of the rest of the site is Conservation with Mining, which also includes grazing as a tribal reserved treaty right (parties agreed to disagree on that in the EIS). The actual waste site is zoned Industrial Exclusive and has a lower brownfields based clean-up standard. There is another Industrial designation also where local government could expand industry using the existing infrastructure at the site. There was a transfer of 768 Acres of land to Port of Benton during the EIS process and some of the land was sold to industrial companies, and some to the city of Richland for industrial development. Overall, the outcome is a compromise between environmental preservation and social/economic concerns.

Future Generations: A National Monument has been put in place, with good complete information. The Hanford Reach salmon run has been protected; this is the main run for all of the Pacific Northwest including Canada and Alaska and is under federal treaty with Canada. Native American cultural sites have been protected. An Agency (USFWS) will address access for the public, tribes, research, etc. with a mission more oriented to dealing with public access.

Dissemination of Information: This is occurring through the two ongoing federal advisory committees.

Pragmatic Solutions: Allowing each group to write their own alternative, in standard format for EIS analysis, resulted in practical options. The EIS was prepared in a way that Records of Decision could be made no matter which agency ended up administering the land.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- Process design addresses relevant inter- and intra-governmental relationships
- Balanced representation of all essential and affected interests and values

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: Bringing people in at the very beginning, before there is a proposal, works well. Don't be selective; invite your "enemies".

National/Local: Though the parties were mostly local, the EIS received comments from all over the country due to efforts of national environmental organizations. Designation of the area as a National Monument shows that it was clearly a national issue. A factor that helped participation was having a speakerphone at all meetings, with an open line for whoever wanted to call in. This also helped partners who were 100 to 200 miles away from the meeting place.

Decision-making authority: Although the collaborative groups were advisory to DOE, some on the original FACA committee thought it was more than an advisory group. This was a "non-delegated" EIS; the Assistant Secretary of Energy was the decision-maker and national headquarters were involved at each step. The parties were aware that some lands could have been transferred to other agencies or private ownership, as ultimately occurred.

KARNER BLUE BUTTERFLY CASE REPORT

I. Background

The Karner Blue Butterfly is a federally listed endangered species that in its larval stage feeds on disturbance-dependent wild lupine plants. The largest populations in the United States occur in Wisconsin. A multi-stakeholder group involving the U.S. Fish and Wildlife Service (USFWS) (joint lead agency), Wisconsin Department of Natural Resources (WDNR) (joint lead agency), state departments of Agriculture and Transportation, five forest products companies, nine utility companies, eight county forests, four county highway departments, five town governments, and a non-profit land trust began meeting to develop a combined Habitat Conservation Plan (HCP)/Environmental Impact Statement (EIS). Various partners combined with independent and academic scientists to form standing and ad hoc teams, to work through issues and make recommendations. USFWS served in an advisory role, with participation from their biological, managerial, legal, and law enforcement staffs.

The planning process began when three forest products companies approached the USFWS about developing an HCP, and requested that the process be led by WDNR. WDNR recruited the partners. The group had to figure out how to do a HCP and get organized. These partners wanted to do a completely different kind of HCP, not typical of other HCPs. There was a lot of conflict and distrust at first. Articles of Partnership, which included goals, roles, and procedural rules, took a year to develop. Another key product, the Effectiveness Monitoring Protocol, took two years to develop and will ultimately determine whether or not the plan works. Negotiations included identification of issues at a group meeting, assignment of individuals to write position papers to bring back to the group for discussion, assignment to a team to make recommendations, and back to the large group for decisions. Critics of a proposal were charged with finding a better answer, and often did. Parties to whom the issue did not apply were encouraged to leave it alone. Participants had input throughout and were involved in major decisions. Participants and the public were invited to all partner meetings, which were daylong meetings held monthly for four to five years. The stakeholder group developed the plan, which became the preferred alternative and the basis for the Record of Decision. A lot of alternatives were explored during the process; all alternatives in the EIS had been discussed by the group.

The process resulted in the first statewide HCP in the nation, now recognized as a national model. WDNR got a 10-year incidental take permit in 1999 on behalf of all landowners. The agreed-to program is working well. The landowners are applying adaptive management rigorously. The multi-stakeholder group plus a biological team spent two years developing a monitoring system. Data has now been gathered for five years, and management is being adapted according to the findings. Partners continue to be actively involved.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The driving forces for this conservation program were economic and social. There are a lot of the butterflies in this area and they need continued disturbance, so they depend on coordinated timber and open area management. A key question was how landowners could continue what they're doing and consider the butterfly's needs at the same time. The EIS and first chapter of the HCP have a discourse on this integration. Two sets of objectives were developed: land managers for recreation and forestry will modify their management practices (social and economic needs considered); landowners managing for diversity such as the Nature Conservancy and the State will focus on meeting habitat needs.

Future Generations: Future conservation efforts may use this innovative plan as a model. The parties have signed binding agreements to do habitat conservation. Monitoring shows their progress on both the shifting mosaic strategy and the permanent habitat strategy. There are now 37 partners and the number keeps growing. The partners take turns on a Partners' Implementation Oversight Committee (chairing as well as membership); the committee develops adaptive management solutions and resolves any disputes that come out of implementation.

How Process enhanced use of Science/fact finding: Adaptive management is a key part of this effort and is now required for all HCPs. Experts were brought in from outside the group including university researchers, giving the group free assistance. For example, a monitoring study was commissioned, and resulted in valid recommendations that were ultimately determined to be unaffordable.

How Information was disseminated: Outreach and education is guided by an information plan. In general, the 20% of the landowners who own 80% of the land make up the membership. The outreach channels include the Tree Farm Families (through timber industry), and the USFWS Private Lands program for creating or expanding Karner Blue habitat. Project Wild has put information on Karners on their interactive website, with help from the partnership. Also, public scoping meetings, media interviews, public presentations, and publication of a brochure helped increase public understanding during the planning process. A recent three-year review report to USFWS documents that 18 partners have been involved in over 250 outreach and education activities with an estimated 8 million contacts. Activities included a display along Interstate Highway 94, a conservation video that aired extensively on public television, staffed displays at festivals, partner-guided tours of restored sites, and volunteer work parties.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- Rigid ground rules and Meeting structure
- Responsible and sustained engagement of the parties
- Options for integrating mutual gains into the agreement explored.
- All parties plan for implementation and clarification of responsibilities and roles

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: The effort started before the NEPA process began, and continued through the EIS to implementation, monitoring, and adaptive management.

Legitimacy of forum: At first, some stakeholders and some within WDNR thought the effort was contrived because it was initiated by timber industry. However, the USFWS had the credibility as a regulating agency to get others to participate.

Decision-making authority: WDNR served as the leader/facilitator but was also an equal partner in the group. FWS didn't participate, but sat at the table and let them know the sideboards, because they were the ultimate decision maker. The group felt confident their plan would be accepted by the agencies.

LAS CIENEGAS NATIONAL CONSERVATION AREA CASE REPORT

I. Background

The Sonoita Valley, Arizona, is about 50 miles southeast of Tucson, and is known for its sweeping vistas, rolling grasslands, and watershed, that provide habitat for rare native fish and a rich diversity of other wildlife. A large portion of the Valley was transferred to the BLM in 1988 by Pima County. Shortly thereafter, BLM began a planning effort for the area, which soon came to a halt due to the divisiveness that surfaced at the first few public meetings.

In 1995 BLM restarted its planning process, by helping to form the Sonoita Valley Planning Partnership. The Partnership was open to the public, and contained a balance of interests, with representatives from a variety of communities in southern Arizona, organized user groups (mountain bikers, off-highway vehicle clubs, hikers), grazing and mining interests, and conservation organizations, among others. The BLM hired a professional facilitator to organize and run the meetings.

Through the help of the facilitator the Partnership designed a framework for process, agreeing to meet monthly and to establish sub groups that would report to the group as a whole. The group agreed that decisions would be made by consensus whenever possible. Where a consensus could not be reached after lengthy discussion and fact finding, the group would resort to a vote, with the majority determining the course of action on these issues. The products of the Group—"Desired Condition Statements", would be submitted to BLM as recommendations.

The partnership functioned so well that after two years the facilitator advised the group that his services were no longer needed. Meetings have since been facilitated by the BLM.

From 1995 to 2001 the Partnership developed Desired Condition Statements for the area, as well as alternative management strategies, going through a variety of issues relating to grazing, off-road vehicle use, protection of cultural resources, vegetation, minerals, among others. The effectiveness of the group was acknowledged by Congress in the 2001 Act that designated the area as a National Conservation Area. The EIS for the area was issued in 2003, and relies on many of the agreements reached by the group during its 1995-2001 planning process.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The consensus process encouraged a balance of interests. For example, several groups were initially adamantly opposed to continued grazing in the area. The four ranchers with permits for the area resisted an all-or-nothing solution and understandably, wished to continue their livelihood. The partnership process allowed for these concerns to be aired, and encouraged fact finding (group and face-to-face meetings, field trips) about the issue, which led to the groups opposed to grazing eventually coming to the understanding that this activity was consistent with the health of the resource if it was managed responsibly.

Future Generations: The policies implemented by the plan should ensure the health of the Las Cienegas NCA for the enjoyment of future generations. These policies were captured by the legislation creating the NCA.

Dissemination of Information: The partnership actively engaged the media and other sources to inform the community about the development of the plan. Notices of meetings, meeting minutes, and other documents were transmitted to Congressional staff, as well as State and county officials.

Changes in Behavior: By participating in the process, parties agreed to accept the responsibility of coming together as a group to learn about the resources, and the impact of various activities. This was a tremendous shift in attitude from the false start in 1989, when the process had to be halted because the atmosphere in the initial meetings was so divisive.

How Process enhanced use of Science: The process structure enabled parties to focus on issues from an ecosystem perspective. The "Arizona Trail" (a proposed non-motorized Trail running north to south through the area) as one example, was plotted based on its effect on the entire resource. The plan ensured that it would run on existing roads wherever possible, and that it would be adequately policed by proponents of the Trail. In addition, the process enabled the parties to learn more about the ecosystem-wide impact of grazing, causing several parties to reverse their initial positions on this issue.

How Science enhanced the Process: The partnership relied heavily on GIS applications as well as scientific studies to develop Desired Condition Statements for the area.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- Well thought-out design
- Structured forum with group autonomy
- Modified consensus-based decision-making process
- Facilitated meetings
- Subcommittees established
- Emphasis on fact finding

IV. How Case Responds to Other Themes of Interest

National/Local: This was primarily local in nature, although there was significant outreach to entities that had a national perspective.

Decision-making authority: The Partnership was advisory, but was informed by BLM that its recommendations would be given great weight in developing management alternatives under NEPA.

I. Background

The bison herd population that winters in the National Elk Refuge (the Refuge) has grown dramatically over the past 20 years, increasing from about 50 animals in the 1980's to over 800 at present. The bison population ballooned since the late 1980's after discovering the supplemental winter feed that is provided to elk on the Refuge by the U.S. Fish and Wildlife Service (FWS). In the late 1980's bison began displacing elk on the established winter feed lines forcing the Refuge to create a separate line of feed for the bison.

The increased bison population has adversely impacted the Refuge by diminishing the amount of forage and vegetation available to elk and bison, and by increasing the potential for transmission of disease between bison, elk, and privately owned cattle on neighboring lands. Since the 1980's the FWS has been working on a plan that would attempt to satisfy the strongly held interests involved in this dispute. Among other interests, conservationists are concerned about habitat degradation, animal rights groups oppose hunting as a means to reduce the number of buffalo, ranchers are concerned about disease transmission, local businesses are concerned about the effect that any measures taken to manage the herds will have on the local economy, and Indian Tribes would like a plan that takes into account the role that bison have played in their culture and traditions.

The present EIS process follows a previous NEPA effort to develop a bison and elk herd management plan that was successfully challenged in federal court (Fund for Animals.v. Clark et.al). The National Park Service and Fish and Wildlife Service are co-leads on the preparation of this EIS. The U.S. Forest Service, USDA/APHIS, and the Bureau of Land Management serve as cooperating agencies. The State of Wyoming Game and Fish Department is serving as a "partner." Other interests contributing to the development of the EIS include Indian Tribes, ranchers, hunters, local businesses, environmental groups, and animal rights groups.

Because of the interests that have clashed in the development of the herd management plan, the FWS and NPS decided to work with the U.S. Institute for Environmental Conflict Resolution to conduct a Situation Assessment of the conflict. The U.S. Institute partnered with the Meridian Institute of Dillon, Colorado and the Institute for Environment and Natural Resources at the University of Wyoming. The assessment team interviewed over 175 individuals in the Spring of 2000 to ascertain all of the interests at play in the conflict.

The assessment concluded that there was considerable common ground amongst those interviewed. The commonalities included a shared vision of healthy herds of elk and bison; a general understanding of the importance of the herds to the Jackson area economy and way of life; a recognition of the national significance of the herds; a desire for change, both in the way the state and federal agencies manage the herds and work with each other; and finally, a strong

desire for more and better information, especially scientific data, upon which to base management decisions.

The assessment also found, however, that there were strongly held divergent opinions on optimal herd size, disease management, artificial feeding, and additional herd management tools such as hunting, increasing forage by irrigation, and controlled burning. The Assessment also identified a low level of trust amongst several parties in the way the lead federal agencies were carrying out their plan.

The Assessment recommended that FWS/NPS look more closely at interests involved in herd management in designing alternatives for an EIS. It recommended a transparent public participation process that would include a science advisory board to address the science issues. It also recommended that decisions be made by stakeholders through a consensus-based process.

The FWS/NPS followed many of these recommendations and designed a process that would allow the EIS to better reflect the interests at issue. While the agencies determined that a consensus-based process was not a viable option because of FACA constraints, they did understand the need to get a better understanding of particular interests, and to educate the public about the science and facts underlying these issues. The co-lead agencies increased their understanding of the public concerns and interests in 20 facilitated public meetings, and have closely vetted each proposed alternative to ensure that all interests are fairly represented. The FWS/NPS also set up a three scientist panel to evaluate the effects of winter feed on the Refuge habitat, and contracted with Texas A and M University for scientific research services. Initial drafts of the EIS are being reviewed by academic researchers, among others, to determine if the alternatives reflect a fair view of the interests. The draft EIS is scheduled to be issued for public comment in December of 2004.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The goal of the EIS development process is to balance the interests (animal rights, conservation, ranching, tourism, Tribal, livestock, others) that bear on this conflict within the parameters of legal authority. The EIS will take into account the Conflict Assessment, as well as the information it has learned from the more than 20 meetings it has conducted in the scoping and alternative development process for the present EIS. As noted above, the draft versions of the EIS have been rigorously reviewed by FWS/NPS, as well as academicians, to ensure that alternatives accurately reflect the interests that that have been expressed in this process.

Future Generations: The overwhelming majority of people interviewed for the Situation Assessment believed that elk and bison in the Refuge need to be managed in a manner that promotes their good health and ensures their continued viability. If the final EIS reflects this sentiment, and is effectively implemented, future generations will be given the opportunity to observe these healthy herds in National Elk Refuge habitat.

How Process Enhanced Use of Science: One of the fundamental findings of the Situation Assessment was that stakeholders were unsure of the science involved in the development of the bison and elk herd management plan. FWS/NPS has attempted to remedy this in the EIS process by, among other things, establishing a 3-person scientific panel to examine the impact to habitat, and by contracting with Texas A and M University to review scientific literature pertaining to herd management issues. FWS/NPS has also engaged the service of other academics to study the alternative development process to determine it accurately the range of interests that have been expressed through the public process. In addition, by working together, the government agencies grappling with these issues have come to the understanding that the herd management issues are in need of an ecosystem-wide solution, as the herd travel across several Federal and State boundaries.

How Science has Enhanced use of Process: FWS/NPS has used computer modeling, and GIS applications in developing proposals for the elk and bison herd management plans.

Practical Problem Solving: Leading up to the present EIS process, the FWS/NPS agreed on a vaccination plan (as part of an Environmental Assessment) for elk that contains several practical options. The plan delineates the times of the year during which elk can be vaccinated (only during feeding season), the means of vaccination, and contains a 3-year sunset clause.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- Situation assessment undertaken.
- Interest identification
- Resources devoted to fact-finding and science.

ECR Problems:

- Parties do not own forum, and are not autonomous
- Potential lack of trust by public (according to Situation Assessment)

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: This is upstream and downstream NEPA, following two lawsuits from the mid-late 1990's, but preceding the issuance of an EIS. The Situation Assessment undertaken in 2001 has been the driving force behind the present effort of carefully ascertaining all interests to ensure the alternatives fairly represent all interests at stake, within the parameters of existing legal authority.

Local/National: The herd management plan involves local and national interests. The health of the herd concerns organizations that are local, and national in focus. The economic interests, such as tourism, tend to be more local in focus.

Legitimacy of forum: The EIS process was undertaken pursuant to an agreement between FWS and NPS to work as co-leads in developing the EIS. The Forest Service, the Bureau of Land Management, and USDA/APHIS agreed in writing to serve as to cooperating agencies. The State of Wyoming agreed in writing to serve as a partner in developing the agreement. These formalized relationships have enabled the parties to work together in developing the draft EIS.

Decision-making authority: Stakeholders, and the public at large, have primarily played a consultant role in the EIS process. Their respective views have been solicited, and are being taken into account in the development of the draft EIS.

PARIS PIKE CASE REPORT

I. Background

The Paris Pike Highway, a road which links Lexington, KY and Paris, KY, is part of a turnpike established as a private toll road in 1830. It is within the Paris Pike Historic District in the bluegrass region of Kentucky. Paris Pike is lined with historic rock fences, springhouses, large trees, and picturesque horse farms.

In the mid-1960s, planning began to address growing traffic and safety concerns along the Paris Pike Highway. By 1973, a plan calling for a four-lane divided highway with a uniform 40-foot median was developed. Public debate over the proposed project's impact on the historic nature of the corridor, however, led to a civil suit in 1977 and a court injunction halting the project in 1979. After several more corridor studies and a series of fatal automobile crashes in the mid-1980s, the Kentucky Transportation Cabinet (KYTC) worked with FHWA, the State Historic Preservation Officer, the Kentucky Department of Natural Resources, the Bluegrass Trust for Historic Preservation, and other state and local agencies and organizations to develop a memorandum of agreement (MOA). In 1991 another EIS was completed and the MOA was signed regarding historic preservation and mitigation. The MOA outlined a basic vision for the corridor and created an advisory task force. The advisory task force included the aforementioned agencies, as well as a variety of other state and local agencies, as well as environmental, historic preservation, landowner, and other citizen groups.

The Paris Pike project took a collaborative, interdisciplinary approach that involved all stakeholders. Taking a Context Sensitive Solutions (CSS)-based approach - that is, considering the entire context in which the project would exist - enabled KYTC to exceed normal project requirements. Elements of CSS include:

- Fit the road to the land. Look at the landscape to determine how best to make a project blend with its physical features and its cultural context.
- Work with groups of residents who share similar concerns.
- Incorporate community feedback into the final design.
- Involve contractors in constructibility reviews to stress design sensitivities outlined in project documents.

In response to initial public opposition to the project, KYTC used a variety of techniques to encourage community involvement, foster consensus among stakeholders, incorporate community values and feedback into the final design, and ensure the effective delivery of environmental commitments. The stakeholder group process included education on road design, field trips/hayrides, traffic counts by the group, and sharing of personal accident histories. A firm was contracted to manage public participation. The public was kept informed with public meetings, property-owner workshops, and monthly newsletters to educate and solicit feedback from community members. 3-D computer models of roadway designs (alignments draped over

aerial photographs to create realistic imagery) were displayed at meetings and workshops to facilitate understanding of the project. In addition, KYTC introduced electronic polling as a means to measure stakeholder opinions on design issues. These methods succeeded, resulting in the issuance of the 1993 Paris Pike Committee Report. The Report was signed by all stakeholders, and sets forth guidelines for design and development. The issuance of the Report led to the lifting of the court injunction in 1993, and KYTC began construction in 1999. The new four-lane divided highway is now completed.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The project was designed to balance mobility and safety issues with natural and human environmental concerns. Safety issues included, among other things, a dangerous combination of high-speed commuter traffic, high-speed tractor-trailers, slower horse trailers, and very slow farm equipment. The plan took into account environmental, social (cultural, historic, and aesthetic), and economic (road was widened and is a primary travel route from Paris to Lexington) outcomes.

Future Generations: This highly traveled road has environmental and social resources left in place for future generations to enjoy. Example benefits include: an interpretive center that was developed and turned over to the Bourbon County Historical Society (this included restoration of the historic Wright House that houses the center); and the rock wall project – old ones were torn down and identical walls were built along the new road alignment.

Dissemination of Information: KYTC developed exhibits, kiosk-type displays, and a driving-tour brochure to identify and explain interesting local features along the corridor. Observation points have been created along the corridor, and a historic farmhouse has been designated for use as a visitor interpretive center. KYTC has made countless presentations; the project has been highly covered in print media; and the project has been used in many FHWA training courses as a showcase. Mitigation measures developed for this project have spread to be used in other projects.

How process enhanced use of science/fact finding: A big factor in this project was integration of local knowledge, as indicated by the adoption of the CSS-based approach discussed above. This led to, among other things, the use of natural landscape patterns as a guide for fitting the roadway geometry, grading, landscaping, and materials into the surrounding cultural, historic, scenic, and natural environment; the creation of an alignment and cross-section structure that moves with and around the hilly terrain instead of through it; and a natural landscape pattern with less cut and fill, which reduced earthwork costs.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- Well thought-out conflict resolution process
- Use of facilitator

- Interest identification
- Participants have access to best available information
- Use of appropriate technology to facilitate engagement

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: This type of post-NEPA, design phase effort has potential to work well for other transportation projects where the location has already been decided.

Local/National: While the stakeholders involved were local, national level landscape architects and design engineers assisted, and the State Historic Preservation Officer was closely involved. The group polling process allowed the public to air their issues and concerns anonymously, and tabulation was almost instantaneous.

Legitimacy of forum: The process was fairly formal and was spelled out in a Memorandum of Agreement. Hierarchies of teams were created such as an executive team and various working teams. Membership remained open and all who wanted to be involved were accepted for participation in the appropriate teams. The project agreement shaped the process, and outlined conditions under which they could receive funding.

FHWA approved a special experiment in order to secure the involvement of top quality contractors. A rigorous unique quality based prequalification process was developed, and the five firms that qualified were exclusively allowed to submit bids for the project's work phases.

Decision-making authority: For NEPA this ultimately rested with FHWA and KYTC, with other agencies and stakeholder groups in an advisory role. However, the Task Force was the decision-maker on the design in that they had veto power. The process used governmental participants to come up with options that were then taken to the public for their rejection or concurrence.

PARK OVERFLIGHTS CASE REPORT

I. Background

In 1987, Congress passed the National Parks Overflights Act of 1987, which directed the National Park Service (NPS) and the Federal Aviation Administration (FAA) to study the effect of aircraft overflights on the National Park System. The act was motivated by the sense that the increase in sightseeing flights over National Parks adversely impacted the ability of park visitors to enjoy the quiet and solitude of parks, and also created unsafe conditions in the air (the legislation was introduced following a collision of sightseeing flights over the Grand Canyon).

In 1994, NPS and FAA released their report on park overflights. The report recommended the development of a process to identify, measure, and limit overflight-produced problems in the National Park System. In 1997 President Clinton responded to the report, and to several bills before Congress, by directing the FAA and NPS to form a workgroup consisting of industry, environmental, and Tribal representatives to develop a plan to regulate air tours over National Parks. Senior leadership in the Department of the Interior, National Park Service, Department of Transportation, and FAA, then met and developed a general plan for the group. They decided that the group would function as a subcommittee to the National Park Advisory Board, a standing FACA committee.

The members of the group, called the National Parks Overflights Working Group, (NPOWG), were selected by the NPS and FAA, and represented a variety of industry, and environmental interests. NPS and FAA decided they would not sit on the group, but would instead be its advisors. The NPS and FAA contracted with a mediator to facilitate meetings of the NPOWG. At the initial meeting there was discernable tension between several of the representatives. The industry representatives were concerned in general that the effort might put existing air tour operators out of business. Representatives from environmental organizations were similarly distrustful of the ability of industry to approach these issues in a fair-minded way that would allow for the protection of quiet and solitude in parks. Even the two government agencies convening the process, the FAA and NPS, had fundamental philosophical differences that needed to be worked out before an agreement could be reached.

The group determined that it would make decisions based on consensus. It also adopted a set of ground rules for proceeding and decided that all meetings would be facilitated. The entire process took place over six to eight meetings, from 1997 to 1999.

The group was able to work through its initial tension and reach consensus on all of the issues that it took under consideration. Its work was used as the basis for legislation which was signed into law in April of 2000, called the National Parks Air Tour Management Act of 2000. The legislation essentially calls for the FAA and the NPS to develop Air Tour Management Plans for air tour flights over national parks. There have, however, been problems and delays associated with implementing this law. To date, four years after the passage of the Act, no ATMPS have

been implemented. Individuals in both the FAA and NPS believe the main reason for this is that the agencies have differences over the meaning of terms in their initial agreement.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The agreement would allow the FAA and NPS to determine appropriate routes, the times of the day during which flights would be appropriate, and possible caps on the numbers of flights. The agreement also sets up a process that allows existing operators to operate at existing levels until a particular plan is approved, and standards under which to judge the applications of new operators who seek to operate in parks without an existing plan.

This regulatory scheme balances the environmental interest of ensuring that Air Tour Management Plans reflect the values of National Parks while taking into account the economic interests of the air tour industry, in particular, the interests of existing operators, who were fearful at the start of the process that the agreement would severely curtail their ongoing business.

Future Generations: Future generations will benefit from the agreement because it will allow them a much better opportunity to experience quite and solitude when they visit National Parks.

How Process Enhanced Use of Science: Through the structure of the process, the Committee was able to receive reports on how the NPS had developed methods of measuring aircraft noise in parks. This gave the Committee a degree of confidence in NPS's ability to carry out this function.

How Process Changed Mindset: Going into this process, there was a great deal of concern that an agreement would result in the NPS having control of the airspace over National Parks. As the process played out it became clear that this possibility was as unacceptable to the Park Service as it was to the FAA and the air tour and general aviation industry. The agreement explicitly provides that the FAA would retain its regulatory authority over park airspace.

Also, the process enabled parties representing seemingly adverse interests to find common ground, and form alliances. Several participants in the process have noted that leaders in the Group often "policed" other members with similar interests to ensure that their actions were taken in good faith, in accordance with the interests of the group as a whole.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- Well-designed process
- Independence of group, allowing for easy identification of interests
- Transparency—meetings open to public
- Group autonomy
- Consensus-based
- Emphasis on fact finding

- Interest identification allowed for creative solutions—regulation of flights by route and by time of day

ECR Problems:
- NPS and FAA have had difficulty implementing agreement.
- NPS and FAA not members of NPOWG—significant interests not represented.
- NPOWG did not completely own process.

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: This was upstream NEPA. The agreement served as the basis for the Air Tour legislation. The legislation requires a NEPA process for each Air Tour Management plan.

Local/National: Every side to this issue involved local and national interests. The air tour industry catered to people from around the world, who wished to take sightseeing tours over parks. At the same time, many of these businesses were made up individuals who were local to a particular park. The environmental interests National Parks and Conservation Association (NPCA), Grand Canyon Trust) involved were primarily national in scope.

Legitimacy of forum: The forum had the imprimatur of Congress, and the Clinton administration. This gave comfort to the participants that their work would be taken seriously.

Creative approaches: The group agreed that all Records of Decision emanating from Air Tour Management Plans (ATMP's) should be signed jointly by the FAA Administrator and the Director of the National Park Service. This was a creative way of dealing with technical issues, ensuring that both agencies' perspectives would be represented in the ROD.

Also, the parties agreed to think of tours in terms of the time and spatial aspects of overflights. ATMP's could regulate aircraft routes, as well as the times of day in which they were allowed. This was a creative way of opening areas for agreement.

Decision-making authority: The group essentially served as an advisory body, whose advice was eagerly sought (and embraced) by the administration and Congress.

SAN JUAN NATIONAL FOREST CASE REPORT

I. Background

This multi-stakeholder process was convened by the USDA Forest Service along with county governments, the Ft. Lewis College Office of Community Services (OCS) and others, for the purpose of developing a land use plan for the San Juan National Forest in southwestern Colorado. While the process was open to the public at large, the Bureau of Land Management (BLM), as well as several State and local agencies have been involved in the effort. The process built on an earlier collaborative effort for ponderosa pine restoration that involved many of the same partners.

The process began during the pre-NEPA and scoping stages, and is continuing to evolve all the way through the NEPA process for the San Juan National Forest Plan revision. Two types of working groups were formed—three groups that addressed geographically focused issues, and eight groups that addressed topical areas (timber, old growth, prescribed fire, recreation management, travel management, wildlife, range and aquatic issues). All groups were facilitated by the Fort Lewis College Office of Community Services. Working groups recommended ideas to include in one or more NEPA alternatives. Those with wide support would appear in more alternatives, those with fewer advocates in only one. People kept showing up for the study groups. Afterwards, many of them joined the working groups for another six months to a year. Many have gone on to participate in project level analyses and decisions, and volunteering to help with implementation. Participants are also willing to come back to the table after a long hiatus. This effort helped spawn a great deal of public participation in a later Fire Plan effort. A National Monument was recently designated in this area, and though many in the community were opposed, planning for the new monument has been a productive community process in part due to all of the collaborative efforts that preceded it.

The process aims to build knowledge and understanding of issues and the interactions between the community and public land management, along with encouraging commitments to stewardship. The meetings had a roundtable format, and all input was recorded.

The process promoted community-based stewardship. When the National Fire Plan came along, the same partners developed community fire plans in the five counties. The plans are very comprehensive, including an integrated Regional strategy, a strong education component, and collaborative mapping of interface areas. The capacity to do this was developed during the pine restoration and forest planning efforts.

II. How NEPA Section 101 was furthered by the case:

Balance of Interests: The NEPA Section 101 concept of "productive harmony" was discussed during this process. People will take care of the environment and its habitats if it makes sense to

them and meets their needs. There was more emphasis on social (especially) and economic analysis than the typical Forest Plan revision process that focuses heavily on biological resources. The community considered providing information on social and economic resources to be their "field work". A social/economic assessment was drafted, built around productive harmony. It included things not generally included such as the relationship of settlement patterns to public lands, and correlations of changes in the local economy with changes in public land management.

Future Generations: Both the short- and long-term were considered throughout the process, seeking solutions that will benefit future generations. Improved understanding of the relationship between local communities and public lands leads to improved stewardship of the resources. As in the fire plan example above, capacity built through the collaborative process extends into new directions and will continue to in the future. One focus is to understand the trends that are at work, e.g. new development occurring against the Forest boundary - two counties now require fire hazard mitigation plans in order to get approval for subdivisions.

Pragmatic Solutions: Immediate suggestions for on-the-ground improvements were passed on and implemented. In one example, a request from the District Ranger for people to not use a specific trail, to help the elk during a hard winter, was complied with even without regulation and enforcement. As noted above, an economic/social assessment was also performed by one of the working groups. Another example of a pragmatic solution is the manner in which the group analyzed sage grouse management. After all the factors were considered the group realized that it was not cattle grazing that had caused a decline in Sage Grouse, but rather that the brush component had been removed by land managers over the years. This led to trying some reintroduction of sage grouse in likely places as a first step in adaptive management.

Dissemination of Information: An extensive mailing list, newsletter updates (including progress reports from the study groups), and web-based applications served as a mechanism for people who couldn't take part in the groups. The website southwestcoloradofires.org will serve as prototype for forest plan revision website (but the new website will be more interactive). Participants talked to others in the community to bring in other ideas and opinions and then brought new information back out. The agency solicited input from broader mailing list at various points in the process.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- Participants have access to best available information
- Process is voluntary, informal, and flexible
- Process design is transparent to parties
- Neutral facilitation

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: While stakeholder collaboration is potentially valuable throughout the NEPA process, starting early is better than starting later. The San Juan Initiative conveners now know how to do the front end, and are still learning how to follow it all the way through to an outcome that incorporates all the perspectives. The key will be not throwing out the baby with the bathwater at later stages of the process. Once the NEPA work has been done, it should not be used just for that plan or project; agencies need to carry forward what was learned to future issues and decisions. Another suggestion is not to start on the hardest, most complex project. In this community, the process was used on more localized projects first, which led to confidence in the process when it was then applied to the highly complex plan revision.

Participant factors: Local organizations were well positioned with national counterparts. State level environmental groups declined to participate based on request of the local groups, who kept them informed of progress. Mailings and web updates included non-locals. Resources flow to strong collaborative efforts with a broad spectrum of participants. Each party has access to the system in a different way. There is fear among participants that national groups will appeal and litigate even after all their hard work.

Legitimacy of forum: County and Ft. Lewis College participation in the convening granted a lot of legitimacy to the process: the college is institutionally neutral, and the county is highly accessible and credible to constituents and to the political chain. Because of the success of the preceding ponderosa pine restoration initiative, this kind of collaborative effort had legitimacy with the local public from the start.

Approaches to scientific and technical issues: This group tries to stay away from "dueling scientists" and instead builds a common knowledge base and common set of accepted facts. The meeting structure focused on a particular scientific or technical issue; outside experts were brought in to explain the state of scientific knowledge, then facilitated small groups would discuss how it applied to this plan revision. Field trips sometimes followed these meetings, such as one on fire ecology. The eventual intent is for outcomes will be openly monitored to adapt management when necessary.

Decision-making authority: The Forest Service (Regional Forester) has final decision authority: the role of the community process is to make sure the agency has the best biological information and has knowledge of community values, and considers social and economic as well as ecological impacts. Individuals gave advice but the group was not FACA charged – ideas and building blocks were provided.

I. Background

In 1988, the US Forest Service issued an EIS Record of Decision for a land use management plan for the Sequoia National Forest. The Forest Service received twenty-one appeals on the plan, through its administrative process. The appeals covered the gamut of issues addressed by the plan. Some appellants opposed the plan's treatment of grazing in the Forest, several complained about logging, and a few discussed the plan's treatment of off highway vehicles.

Two of these appeals were dealt with separately. Nineteen, however, were considered to have enough commonality to warrant being addressed through a single process.

The Forest Service hired a mediator to attempt to work through the divergent interests represented by the appeals. The mediator worked with the parties to set up ground rules, and a map of how the group would accomplish its goals. This work on process was critical, as there was a great deal of distrust amongst the parties at the outset. Groups opposing timber harvesting believed that Sequoia groves had been abused and over harvested throughout the 1970's and 1980's. Groups opposed to grazing believed the plan would allow for over-grazing, which would impair riparian areas. Groups favoring grazing and timber harvesting were concerned that the Forest Service might curtail these activities, and adversely impact the economies of the communities surrounding the Forest.

Through the structured discourse promoted by the ground rules, the parties came to a general understanding of the importance of ensuring the ecological health of Sequoia National Forest, and of allowing for reasonable uses, such as grazing, timber harvesting, and off road vehicle use, that did not unduly impair forest resources.

The parties agreed to learn as much as they could about issues, setting up sub committees to dig deeply into particular areas, and designing protocols for the reception of scientific information. The parties agreed to make decisions based on consensus.

The effort took approximately 18 months to complete, and resulted in a 150 page mediated settlement agreement (MSA) that was signed by all but three of the participants to the mediation. The 150-page agreement set a standard for multiparty environmental mediations in its in-depth treatment of issues. Among other things, it defined the boundaries of Sequoia groves, determined the appropriate minimum height of grass for grazing in riparian areas, determined the locations for appropriate off highway vehicle use, and called for further scientific study of issues that were unclear. Much of the spirit of the group's work made its way into the Presidential Proclamation creating Sequoia National Monument in 1992, and the Congressional Act creating the Monument in 1999, as well as other Forest Service policies.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The process encouraged the parties to tackle issues in minute detail to balance interests. For instance, the sub group on grazing spent a great deal of energy and time analyzing the effect of grazing in riparian areas. After receiving several presentations on the scientific aspects of grazing in riparian areas, the group came to agreement on the minimum height of grass necessary to ensure the health of riparian areas. This point was satisfactory to ranchers and environmental groups, representing a balance of interests, and thus promoting ecological and economic health.

Another subgroup tackled the issue of how to define the boundaries of a Sequoia Grove. This was of critical importance because of the ecological sensitivity of groves. It was a challenge, though, because it had never been done before. Like other groups, this subgroup painstakingly received presentations from scientists, policymakers, and programmatic officials to come up with a definition of Grove that was acceptable to all interests.

Future Generations: The health of the groves and riparian areas were in the forefront of all major discussions involved in the mediation. Following the completion of the MSA, the groves were designated part of Sequoia National Monument in 1992, by Presidential Proclamation. This protection was later buttressed by Congress, which legislatively designated the area a National Monument in 1999. Future generations should be able to look back on these events as measures that enabled them to enjoy these resources.

How Process Enhanced Use of Science/fact finding: In addition to the work noted above, the group saw a need for detailed studies that were beyond its own capacity to perform. For instance, the information received by the group suggested that the health of Blue Oak trees could be impaired by grazing activities. The MSA recommended that this issue be studied further. The study was carried out and completed in the early 1990's, concluding that grazing activity did not appear to have a damaging impact on the Blue Oak. Also, a science panel was established consisting of neutral scientists to help the parties understand the science issues. The panel was a great help in increasing understanding of the cumulative effects to the watershed, the definition of grove, and many other issues.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- Well thought-out design
- Consensus-based process
- Durable solutions due to time spent on rigorous analysis
- Group autonomy—parties own process
- Sub Committees established
- Emphasis on fact finding
- Use of Mediator to bring parties together
- Parties agree on common goals and principles—the health of the Forest

ECR Problems:

- Less than 100 percent agreement

IV. How Case Responds to Other Themes of Interest

Upstream/Downstream. This is downstream application of NEPA—a mediation that was basically an effort to settle appeals of the Record of Decision. Because it was a settlement process, it was open only to the parties that filed appeals. This aspect enabled parties to focus on discrete sets of issues.

Local/National: There were local and national interests at stake. Ultimately, the local and national interests all agreed to submit to the mediation process, which acted as the means for leveling power imbalances, giving all voices an opportunity to express their interests.

Legitimacy of forum: As this was a settlement process, it had the legitimacy of being part of the administrative/judicial process.

Decision-making authority: The Forest Service was the decision-making body for this dispute. However, the Forest Service empowered the parties to develop proposals through the mediation that were within its legal and policy parameters. The Forest Service made a commitment that would it would take these proposals forward through future NEPA processes.

I. Background

In 1994 the Forest Service began the process of developing a Habitat Conservation Plan for the Spring Mountains National Recreation Area on the Toiyabe National Forest in Nevada. At the same time that the Forest Service needed to do a Forest Plan amendment for the newly designated Spring Mountains National Recreation Area. Multi stakeholder groups were formed to accomplish both of these tasks.

The lead agency for the Forest Plan Amendment was the USDA Forest Service; stakeholders included the U.S. Fish and Wildlife Service, the Nature Conservancy (TNC), and a variety of state, local, and tribal agencies, as well as other environmental and user groups.

The Forest Service and the Fish and Wildlife Service entered into an Interagency Agreement to work together on a plan amendment for management that would meet the needs of all of the species, followed by a conservation agreement to tie the amendment to each individual species needs. Many of the stakeholder organizations were involved in pre-NEPA data collection. The agencies developed the Purpose and Need and performed scoping, then convened a multi-stakeholder group to draft alternatives. The principal issue negotiated was the restriction on public uses of the National Recreation Area as a consequence of conservation measures. The group drafted thirteen alternatives that met their various recreational needs along with the species' needs, including actual wording for standards and guidelines. The group reached consensus on a preferred alternative, which was selected by the Forest Service, and served as the basis for the Conservation Agreement. The Conservation Agreement was "piggy-backed" on to the Plan Amendment, thus negating the need for a second NEPA process.

The Forest Service acted as facilitator, and wanted others to work out their conflicting needs and desires. There were large group meetings, as well as many subgroups. Participants were reminded of the sideboards at all meetings, that all laws must be met including NEPA, National Forest Management Act, Endangered Species Act, and the Archaeological Resources Protection Act. Participation at meetings was open to the public, but the same individuals continued to represent the various stakeholder groups. There was no formal consensus process, but there was a commitment to reaching consensus on a preferred alternative. A coalition of moderate groups developed what became the preferred alternative.

Consensus was reached on a preferred alternative, which became the Forest Service decision. The Conservation Agreement was based on the selected alternative, and has become part of the Clark County Habitat Conservation Plan (HCP), which includes all land ownerships in the area. The Conservation Agreement is intended to provide long-term protection for all rare and sensitive species in the Spring Mountains, such that future listing under the Endangered Species Act will be unnecessary. This agreement is the first of its kind in the nation. Ordinarily, conservation agreements cover a single species; the Spring Mountains agreement addresses the

needs of 68 species of plants and animals, including at least 27 that occur nowhere else in the world and two that are threatened or endangered, on approximately 316,000 acres. The decisions were well accepted by the public, although a local community group disagreed with the fire management measures, and a few user groups felt there was too much curtailment of resource use.

II. How NEPA Section 101 was furthered by the case

Balance of interests: Based on negotiations and collaboration, the participants came up with alternatives that met the needs of species and provided access and recreational opportunities for the public. Species needs were prioritized so that there could be some give and take on the amount of protection. Economics and recreation concerns were considered along with ecological needs.

Future Generations: Many of the species dealt with in the agreement are found nowhere else. The agreement protects these species so future generations can appreciate them. The agreement allows recreation to continue for future generations. Much energy and funding has gone into education and partnerships, which will help shape how people use the area and protect species in the future.

Dissemination of Information: Strong education/partnership relationships are being maintained between the agencies and interested groups. For example, rock-climbing interests participate in education about the sensitive plants on the rock cliffs and are involved in designating routes to protect them. OHV groups patrol and educate other OHV users, and have adopted specific roads and trails for maintenance. The Clark County HCP Implementation and Monitoring Committee continues to provide a public forum for information dissemination about issues and proposals that affect species and habitat. Still, much of southern Nevada's human population remains uninformed or unengaged.

How process enhanced use of science/fact finding: A great deal of raw data existed on species locations and recreational use patterns. TNC developed a predictive model that was accepted by all. Agreement was also reached on data related to historic use of the area, which was sometimes disputed by biologists. In addition, near the beginning of the process, the Forest Service and USFWS developed an "information needs assessment", and contracted the other science entities to collect new data in their respective fields of expertise. The review of the data was an open process, including any interested biologists, and resulted in many changes in the plan. A group of scientists was periodically convened to discuss information gaps, and propose studies to fill the gaps.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- Appropriate use of scientific information
- All key issues, concerns, and perspectives addressed

- Options for integrating mutual gains into agreements explored
- Responsible and sustained engagement of parties
- Process is voluntary, informal and flexible
- Process is consistent with existing laws and regulations, agency missions, policies and legislative parameters.

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: The collaborative effort was "mid-stream" in terms of NEPA, at the alternative development and preferred alternative stage. It could be considered "upstream" in terms of developing the Conservation Agreement. The timing of combining a Forest Plan amendment and Conservation Agreement was much more efficient than trying to do it more site-specifically. This could work well in other locations with similar issues.

National/Local: Most participants were local or perceived as local (e.g. those from Reno or Stanford). It was a positive perception in this case, as the effort did not have a high profile nationally.

Legitimacy of forum: The Forest Plan Amendment process was a legitimate forum for this process. Not only did this group have open membership, but most meetings were called by outside groups, taking turns, to address Federal Advisory Committee Act concerns.

Decision-making authority: Going through the Forest Plan amendment process, it always clear that the Forest Service was the decision-maker; all others were told they were on equal footing. The USFWS authority on the Conservation Agreement was also clear. The stakeholder group had no real authority, yet their consensus agreement was accepted and is being implemented by the agencies. Parties appreciated the shared leadership approach between the Forest Service and USFWS, where the public saw that the Forest Service was not initiating all of the restrictions on recreational users.

SWAN VALLEY CONSERVATION AGREEMENT CASE REPORT

I. Background

Swan Valley lies between the Mission Mountain range and the Swan Mountain range of the Bob Marshall Wilderness. Each range supports a number of grizzly bears. The number of bears in the Mission range, however, has dwindled over the years to fewer than ten. Biologists believe their survival is dependant on their ability to cross Swan Valley and link up with the far greater number (approximately 200) of grizzlies that live in the Bob Marshall Wilderness.

The problem is that much of the Swan Valley is suitable for timber harvesting, and is owned by Plum Creek Timber Company (Plum Creek). Plum Creek's holdings are extensive, making it the largest owner of grizzly habitat in the lower 48 states. In the early 1990's Plum Creek approached the United States Fish and Wildlife Service to initiate discussions on how to manage the Swan Valley in a manner that would protect the threatened grizzlies. Plum Creek sought to develop a plan that would be consistent with Section 7 of the Endangered Species Act by protecting the grizzlies but also enabling Plum Creek to harvest timber on its land. The State of Montana (Department of Natural Resources) and Flathead National Forest were soon brought into these talks, as the parties began the process of developing an agreement for managing the Swan Valley area as an ecosystem that would enhance the ability of the Mission Mountain Range grizzlies to traverse Swan Valley. The process was especially difficult because the ownership pattern of Swan Valley lies in a checkerboard pattern. Plum Creek's holdings trace back to the company that built the first railroad line through this part of Montana, and thus consist of discontiguous square sections of land that alternate with sections of Flathead National Forest.

Despite the complexity of dealing with a checkerboard pattern of land ownership, and the potential for clashes between the interest of timber harvesting and the interest of grizzly protection, the group found common ground, and completed the Swan Valley Conservation Agreement in 1995. According to one of the parties to the discussions, the agreement "provided a process and understanding whereby commercial activities proceed and protection persists."

In developing the agreement the parties had many face-to-face negotiations that were unassisted. The final few sessions that resulted in much of the language of the agreement, were facilitated. The main issues tackled by the agreement are road density, timber harvest, and coordination of forest management activity. The agreement accomplished its main objective, the goal of enabling grizzlies to travel safely from the Mission Range to the Bob Marshall wilderness, by setting up "linkage zones"—areas through which bears could travel without coming across human activity. Several Environmental Assessments, and one EIS, have used the agreement as a foundation for setting policy and guidelines for timber sales, grazing permits, and private road access. The process has also spawned other collaborative ventures. In the past several years Plum Creek has sold over 24,000 acres of its land to the Trust for Public Land, for the purpose of protecting these resources.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The outcome reflects a balance of interests by, as stated above, "providing a process and understanding whereby commercial activities proceed and protection persists". Timber harvesting was able to continue, but in a well-thought manner that enhanced the protection of the endangered grizzlies of the Mission range.

Future Generations: Future generations will benefit by the fact that the agreement enhances the chances of survival of the Swan Valley grizzlies.

How Process enhanced use of Science: The process encourages fact-finding and rigorous scientific research. Plum Creek, for instance, has hired a full time biologist to work cooperatively with scientists from the state and federal agencies, and has recently funded the purchase of collars for grizzly bears, enabling the bears to be more accurately tracked.

How Science enhanced use of Process: The process has relied heavily on GIS applications, aerial surveillance, and other technological methods to implement the agreement. The use of science in this manner has enabled the Forest Service and Plum Creek to manage the land as an ecosystem.

How Information has been disseminated: Learning has been shared through the Flathead National Forest website, public meetings, and through the involvement of the local community. The Swan Valley Conservation Center, for example, although not involved in the agreement, has played a major role in educating the public on the issues faced by the Swan Valley grizzlies.

How Process Changed Mindset: Through the process, the parties were able to come to an understanding the Swan Valley had to be managed as an ecosystem in order to maximize the chances of grizzly survival.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- Well thought-out design
- Structured meeting process
- Facilitated, interest-based negotiation leading to design
- Consensus-based process
- Independent structure of forum—group ownership of process.
- Agreed upon ground rules, and principles to start process
- Science committee engages in cooperative, ongoing research
- Well funded

ECR Problems:

- Closed Process/ Some Stakeholders not engaged (law suits filed).

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: The development of the agreement was upstream NEPA—the parties understood that it could form the basis of future NEPA processes.

Local/national: The local versus national balance of interests has resulted in some friction. A few national environmental groups have been critical of the agreement and expressed skepticism about Plum Creek's commitment to saving this habitat for the grizzlies.

Legitimacy of forum: The closed nature of the forum did affect the process. As a closed forum with few players, parties were able to succinctly focus on interests, and reach an agreement. However, the closed process also provoked skepticism from outside groups. One of these groups has sued the government over the agreement (unsuccessfully).

Decision-making authority: The group has advisory decision making authority. However, its recommendations have been accepted by each of the parties. The group makes its decisions by consensus.

UNCOMPAHGRE PLATEAU—UP PARTNERSHIP CASE REPORT

I. Background

Throughout the 1990's the mule deer population declined by about 40 percent on the Uncompahgre Plateau in southwestern Colorado. The Colorado Department of Natural Resources became aware of this, and brought it to the attention of the major federal land managers on the Plateau, the Bureau of Land Management and the United States Forest Service. The agencies concluded that the decline in the mule deer population was indicative of broader, more systemic problems that affected the entire regional ecosystem. In 2001 the agencies formed the UP partnership, to systematically deal with ecosystem issues. Soon after the initial formation of the group, the Public Lands Partnership, an entity representing the interests of the Colorado counties of Delta, Ouray, San Miguel, and the town of Montrose) became a member of the UP Partnership.

The partnership established its own identity by setting up a Technical Council comprised of representatives from each of the partners to operate and manage the partnership. The Council meets every month to discuss ongoing projects, receive reports on the health of the ecosystem, and to explore new opportunities to enhance the health of the ecosystem. Decisions of the Technical Council are made primarily through a consensus process; with votes taken on the rare occasion that consensus cannot be reached. The partnership also established a "Collaborative Council" that is open to all members of the public. The Collaborative Council meets on a quarterly basis and provides recommendations to the Technical Council.

Through private grants (Ford Foundation, Rocky Mountain Elk Foundation, others), the partnership hired a staff to run the partnership. The partnership has produced several successes, including a Landscape Assessment, a Fuels Reduction Plan, a Fire History project, a Landscape Dynamics Report, a GIS study for grazing allotments, a Native Seed program, and an on-the-ground vegetation enhancement program, as well as the groundwork for several Environmental Assessments.

II. How NEPA Section 101 is furthered by the case

Balance Of Interests: The bifurcated process design provides for a balance of interests. The members of the Technical Council represent interests of the federal and state agencies, and the local communities. In addition, the Collaborative Council, by being open to the general public, has focused on a variety of issues, and its recommendations to the Technical Council also incorporate economic, social, cultural, as well as environmental interests.

Future Generations: Future generations will benefit from the agreement by virtue of the change in mindset—from managing the area as distinct resources divided by arbitrary boundaries, to a seamless area that shares common features, that happen to spill over these boundaries. The

sharing of data, and the ability to act expeditiously and concertedly through the Technical Council, will help preserve the interests of future generations.

Dissemination of Information: The partnership disseminates information and encourages community involvement through the work of its staff. Its educational coordinator visits schools, attends community meetings, and performs general outreach. The Partnership also has a well maintained website.

How Process enhanced use of Science: By employing a cooperative approach the scientists discovered that fire, livestock grazing, and invasive trees were all playing a role in the decline of the mule deer population. This has enabled the partnership to manage the area as an ecosystem. Prior to the partnership, scientific data was rarely shared, so it unlikely that these findings could have been made without this cooperation. The partnership relies heavily on GIS applications, as well other technological means (internet, computer modeling,) to accomplish its goals.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- Well thought-out process design
- Independent structure—allowing for group autonomy
- Venue for public through collaborative council
- Best science encouraged through technical council
- Subcommittee established
- Emphasis on fact finding.
- Interest identification allows for better ecosystem management

IV. How Case Responds to Other Themes of Interest

Creative Management: The partnership has been creative in finding ways to solve problems. For instance, it was able to obtain funding from private sources for the positions that administer the partnership, and carry out its day-to-day activities. These positions are critical to the partnership, not only because of the work they accomplish, but also because they underscore the partnerships existence as an entity that is independent of any one of its members.

Decision-Making Authority: The Collaborative Council has advisory authority; the Technical Council has the authority to make decisions. This structure has allowed for interests to be aired (through the Collaborative Council and the Technical Council) while also enabling partnership to take action. It has promoted the achievement of outcomes.

UPPER SALMON BASIN CASE REPORT

I. Background

The Upper Salmon Basin covers a 6300 square mile area (4 million acres) in central Idaho, of which 90% is public land and 10% private land. Most of the anadromous fish habitat in the basin occurs within private lands. In the late 1980's drought completely dewatered the Lemhi River of the Upper Salmon River Basin. Landowners worked with Forest Service and Idaho Fish and Game biologists to figure out an inexpensive way to allow fish migration to occur at the critical periods

As one of several similar initiatives, in 1991 the Bonneville Power Administration and the Northwest Power Planning Council (which oversees mitigation for the Columbia River system) initiated community-based restoration for anadromous fish habitat for the Lemhi River watershed. The stakeholders included the Lemhi Irrigation District, Idaho Fish and Game, and the Forest Service. The Pahsimeroi River and East Fork of the Salmon River basins were added to the Lemhi to make up the model watershed area. Three years ago all of the Upper Salmon Basin was included in the scope. The project includes cross-jurisdictional issues on federal, state and private lands.

Though "project" is part of the title, this is really a program of fish habitat restoration to mitigate the impact of hydroelectric dams on the Columbia and Snake Rivers. The program includes many site-specific projects The project is coordinated by the Idaho Soil Conservation Commission and has an Advisory Board, which includes representatives from the Bureau of Land Management, USDA Forest Service, and a variety of State, local, and tribal agencies, as well as environmental, landowner, and user group interests. The Advisory Board sets policy and has final approval on projects. Proposed projects are ranked by a technical team of scientists from the above agencies plus others such as the Bureau of Reclamation, National Oceanic and Atmospheric Administration-Fisheries, U.S. Fish and Wildlife Service, Idaho Department of Environmental Quality, Idaho Soil Conservation Commission, and irrigation district representatives.

When this collaborative effort was expanded to the model watershed project, its purpose expanded to improving habitat as well as to improving passage for anadromous fish (salmon and steelhead). The model watershed project began before the start of the NEPA process. The Bonneville Power Administration completed an Environmental Impact Statement for the program in 1998. Also, the Bureau of Reclamation is a big contributor of funding for fish passage projects and has completed its own EIS for projects they are involved in throughout the Columbia River Basin. The advisory board and technical team do not collaboratively address the NEPA process.

The Upper Salmon Basin Watershed Project is unique in the great degree of coordination between agencies. The technical team meets monthly to collectively prioritize proposed projects in order to end up with the most effective strategy to meet the goal of improving fish habitat and

migration. The team developed a rating system and criteria for screening proposals, and does a quarterly review of all projects (in the office and on the ground). Prioritized projects to send on to the advisory committee are selected by discussion and consensus. The advisory committee relies on the Conservation Districts to review the projects for them and finalize a contract for implementation with the landowner. The advisory committee provides policy guidance on the larger picture and is the main vehicle for involving others besides government participants. Advisory committee decisions are also consensus-based. The committee's facilitator is from one of the agencies involved, not a neutral third party. In this case relationships are cooperative enough that participants don't feel the need for outside facilitation.

Agreements/outcomes: Restoration projects have included installation of riparian fencing (51 projects protecting over 52 miles of stream), implementation of pasture management programs, irrigation diversion structure modifications, irrigation efficiency improvements, and irrigation ditch consolidation and elimination.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The management plan written in 1995 guiding the watershed project attempted to balance interests. Implementation of projects ties to that plan and thus serves the greater good. This program is an example of showing that people and high-quality aspects of nature can co-exist in a way that allows a high standard of living and a functioning environment. The program moves toward the goal of improved fish habitat and migration while still maintaining the economic base.

Future Generations: If implementation is successful, there will be excellent fish habitat that is compatible with human use of the land for ranching, logging, mining, and recreation; this legacy will be handed down to future generations.

How process enhanced use of science: The technical team developed processes for evaluation of habitat conditions and a prioritization process for proposed projects.

How was Information Disseminated: Outreach is done through newsletters, many newspaper articles have been written, and interpretation is being developed for the Sacajawea Interpretive Center in Salmon. Technical team members make presentations at professional society meetings, Idaho Cattlemen Association meetings, and other conferences. Program staff and partners participate in school programs including the Envirothon program in central Idaho.

What improvements in relationships among parties occurred as a result of the environmental conflict resolution process?

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- Responsible and sustained engagement of all parties

- Structured process to facilitate timely productive and effective engagement
- Process addresses relevant inter- and intra-governmental relationships
- All parties plan for implementation and clarification of responsibilities and roles

IV. How Case Responds to Other Themes of Interest

Participant factors: Landowners tended to support local agency and interest group involvement.

Legitimacy of forum: Participation of the conservation districts and continued support from landowners gives this program legitimacy with the general public.

Decision-making authority: The advisory committee and technical team do not have any decision-making authority in terms of NEPA. However, they have a great deal of influence on private and public lands in terms of proposing and prioritizing projects for implementation.